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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/827,197

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Frank J. Colombo

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12/14/2006

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EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/827,197

Applicant(s)

COLOMBO, FRANK J.

Examiner

Marc A. Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10-13, 15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-13, 15 and 17-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**NEW REJECTIONS**

***Specification***

1. The disclosure is objected to because of the following informalities: Claims 41 and 43 – 45 are dependent on Claim 1, which has been cancelled. For purposes of examination, the claims will be interpreted to be dependent on Claim 35.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 35 – 36, 38 – 42 and 44 – 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagaki et al (U.S. Patent No. 5,352,043) in view of Muller et al (U.S. Patent Publication No. 2002/0004112 A1).

With regard to Claims 35 – 36, 38 – 41 and 47 – 48, Takagaki et al disclose a barrier film (therefore a chemical barrier film; column 6, lines 43 – 47) that is a packaging film (film for a bag; column 5, lines 43 – 47) comprising an inner layer comprising nylon (column 5, lines 61 – 65), a middle layer comprising a polyester attached to a surface of the middle layer (polyethylene terephthalate; column 6, lines 37 – 42) and an outer layer comprising a polyolefin attached to a surface of the middle layer (polyethylene; column 6, lines 37 – 42). With regard to the claimed

aspect of the nylon being 'unoriented,' Takagaki et al do not teach that the nylon is oriented. The claimed aspect of the nylon being 'unoriented' therefore reads on Takagaki et al. Takagaki et al fail to disclose a nylon and polyester that are biaxially oriented.

Muller et al teach that it is known in the art to use of biaxially oriented nylon and polyester in a packaging film for the purpose of obtaining a film having superior properties (paragraph 0002). One of ordinary skill in the art would therefore have recognized the advantage of providing for the biaxial orientation of Muller et al in Takagaki et al, which comprises a packaging film, depending on the desired properties of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a nylon and polyester that are biaxially oriented in Takagaki et al in order to obtain a film having superior properties as taught by Muller et al.

Takagaki et al also fail to disclose a nylon comprising nylon 6. However, Takagaki et al disclose a film comprising nylon as discussed above. It would therefore be obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for any single nylon polymer in Takagaki et al, including nylon 6.

With regard to Claims 42 and 46, Takagaki et al disclose a polyester that is metallized (plastic film comprising aluminum foil, therefore metal foil; column 6, lines 43 – 47).

With regard to Claim 44, the inner, middle and outer layers are laminated together (column 6, lines 48 – 51).

With regard to Claim 45, Takagaki et al further disclose adhesive layers between the outer and middle layer and between the middle layer and inner layer (intermediate layers; column 6, line 30).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagaki et al (U.S. Patent No. 5,352,043) in view of Muller et al (U.S. Patent Publication No. 2002/0004112 A1) and further in view of Ng et al (WO 95/15992).

Takagaki et al and Muller et al disclose a film comprising a layer of nylon as discussed above. Takagaki et al and Muller et al fail to disclose a nylon comprising nylon 6 and a blend of nylon 6 and nylon 66.

Ng et al teach the use of a blend of nylon 6 and nylon 66 (page 4, lines 3 – 6) in the making of a nylon film (page 6, lines 20 – 31) for the purpose of obtaining a film having maximum bond strength of sealing (page 4, lines 27 – 30). One of ordinary skill in the art would therefore have recognized the advantage of providing for the blend of Ng et al in Takagaki et al and Muller et al, which comprises a nylon film, depending on the desired bond strength of sealing of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for nylon 6 and a blend of nylon 6 and nylon 66 in Takagaki et al and Muller et al in order to obtain good adhesion to both layers as taught by Ng et al.

6. Claims 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagaki et al (U.S. Patent No. 5,352,043) in view of Muller et al (U.S. Patent Publication No. 2002/0004112 A1) and further in view of Hatano et al (U.S. Patent No. 5,527,616).

Takagaki et al and Muller et al disclose a nylon film as stated above. Takagaki et al and Muller et al fail to disclose a nylon film having an outer layer that is coextruded.

Hatano et al disclose a nylon film having a layer that is coextruded for the purpose of obtaining a film having strength and heat sealability (column 1, lines 19 – 37). One of ordinary skill in the art would therefore have recognized the advantage of providing for the coextrusion of Hatano et al in Takagaki et al and Muller et al, which comprises a nylon film, depending on the desired strength and heat sealability of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for an outer layer that is coextruded in Takagaki et al and Muller et al in order to obtain a film having strength and heat sealability as taught by Hatano et al.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1 – 5, 10 – 13, 15 and 17 – 19 as being anticipated by Takagaki et al (U.S. Patent No. 5,352,043), 35 U.S.C. 103(a) rejection of Claims 6 – 9 and 20 – 21 as being unpatentable over Takagaki et al (U.S. Patent No. 5,352,043) in view of Ng et al (WO 95/15992) and 35 U.S.C. 103(a) rejection of Claims 14 and 16 as being unpatentable over Takagaki et al (U.S. Patent No. 5,352,043) in view of Hatano et al (U.S. Patent No. 5,527,616), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 8 of the remarks dated September 23, 2006, that the examples of Takagaki et al do not disclose a heat adhesive layer comprising nylon 6.

However, a heat adhesive layer is not claimed. Furthermore, Takagaki et al is not limited to the examples; as stated above, and inner layer comprising nylon is disclosed by Takagaki et al.

Applicant also argues, on page 10, that Ng et al teach a nylon copolymer for improving bond strength, not the claimed nylons.

However, as stated above, a film comprising the claimed blend and maximum bond strength is taught by Ng et al

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson 12/11/06*  
Marc A. Patterson, PhD.  
Primary Examiner  
Art Unit 1772